

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed August 22, 2005 ("Office Action"). To clarify various aspects of the inventive subject matter, Applicant has amended Claim 83. To advance prosecution of this application, Applicant has responded to each notation by the Examiner. Applicant submits that all of the pending claims are allowable over the cited reference. Applicant respectfully requests reconsideration, further examination, and favorable action in this case.

Improper Constructive Election and Withdrawal of Claims

The Office Action improperly withdrew from consideration Claims 68-69, 71-72, and 84-91, all of which are directed towards previously elected species XI (FIGURES 12-16). In a Restriction Requirement of May 4, 2005, ("Restriction Requirement") the PTO identified eleven species, one of which was indicated as follows: "XI. The species best illustrated by specification page 61, starting in line 16." *See* Restriction Requirement, Page 2. In the Application on page 61 starting at line 16, the specification recites as follows:

FIGURES 12-16 are flow charts illustrating example methods of enhancing the effective switching speed of a router utilizing a star switching fabric without increasing switching speed of the individual switching components of the router.

Accordingly, in a Response to the Restriction Requirement filed on June 6, 2005, Applicant elected to prosecute Species XI (FIGURES 12-16), submitting that Claims 58-91 read on the elected species. The Office Action at page 2 acknowledged "Applicant's election without traverse of Species XI (FIGURES 12-16)." However, the Office Action improperly withdrew claims directed towards Species XI. (FIGURES 12-16).

a. Claims 68 and 69 were improperly withdrawn

Particularly, the Office Action withdrew Claims 68 and 69, acknowledging that Applicant cancelled Claim 67 and indicating that "Claims 68 and 69 recite similar species as original claim 67, and should have been cancelled." *See* Office Action, page 2. Contrary to the Examiner's assertion, Claim 67 was readable on elected species XI, Applicant merely cancelled Claim 67 as being a duplicate of previously pending Claim 68. Regardless of the reason for canceling Claim 67, the Office Action acknowledged that Claims 67-69 are

directed towards FIGURE 13 (*Id.* at 2), which is part of elected species XI (FIGURES 12-16). Accordingly, the withdrawal of Claims 68-69 was improper. And, Applicant respectfully requests examination of Claims 68-69.

b. Claims 71-82 and 84-91 were improperly withdrawn

Additionally, the Office Action withdrew Claims 71-82 and 84-91. Similar to that noted above, the Office Action acknowledged that Claims 71-82 and 84-91 are directed towards FIGURE 13 (*Id.* at 2), which is part of elected species XI (FIGURES 12-16). Accordingly, the withdrawal of Claims 71-82 and 84-91 was improper. And, Applicant respectfully requests examination of Claims 71-82 and 84-91.

In maintaining and/or asserting a restriction requirement, Applicant reminds the PTO of the two-fold requirement set forth in MPEP § 803 for a restriction: (1) that there are patentably distinct inventions, and (2) that there would be a serious burden on the examiner if restriction is not required. To clarify the record for the Application, Applicant would appreciate the *prima facie* establishment of the burden utilized in setting forth the previous restriction requirement. *See* MPEP §§ 803, 808.02. Further, should any new restriction requirement be implemented, Applicant would appreciate the appropriate establishment of the above two-fold requirement.

Claim Rejection 35 U.S.C. § 102

The Office Action rejected Claims 58-66, 70, 81, and 83 under 35 U.S.C. § 103(a) as being anticipated by U.S. Patent 5,005,167, granted to Arthurs et al. (“*Arthurs*”). Applicant respectfully traverses these rejections for the reasons discussed below.

At the outset, Applicant provides a reminder that in order to establish a *prima facie* case of anticipation, “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim” (*Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)), and that the elements must be arranged as required by the claim. (*In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)). Furthermore, “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). With these threshold requirements

in mind, Applicant submits that the PTO has failed to establish a *prima facie* case of anticipation using *Arthurs*.

a. **Claim 58 is patentable over *Arthurs***

Specifically, Independent Claim 58 is allowable because *Arthurs* fails to disclose, expressly or inherently, “tuning a second tunable filter of the plurality of tunable filters to a second wavelength while the first tunable filter processes the optical signal having primarily the first wavelength.” (emphasis added). The Office Action cites col. 4, lines 41 - 55 of *Arthurs* as teaching this limitation, however this is incorrect. This passage of *Arthurs* merely states in pertinent part the following:

Each output port 14-1 . . . 14-N has one or more associated wavelength tunable receivers 26-1, 26-2 . . . 26-N which are connected to the star coupler 21 via the optical fibers 27-1, 27-2 . . . 27-N. The optical star coupler 21 serves to transmit a fraction of the power at each wavelengths λ_{11} . . . λ_{1N} to all receivers 26-1 . . . 26-N. Each receiver 26-1 . . . 26-N is tuned to detect one of the wavelengths λ_{11} . . . λ_{1N} .

(*Arthurs*, col. 4, lines 49-56). Clearly, the above passage does not teach tuning a second tunable filter of the plurality of tunable filters to a second wavelength while the first tunable filter processes the optical signal having primarily the first wavelength. Further support of *Arthurs*' lack of teaching the above limitation can be seen with reference to operation of *Arthurs*' system described at Column 2, line 66 - Column 3, line 21:

Packets are transmitted from the input ports to the output ports in transmission cycles. Each transmission cycle comprises two control phases and a transmission phase. The transmission phase of a cycle may overlap the control phase of the subsequent cycle.

Packets arriving at the switch via the incoming trunks are stored in buffers at the input ports. During the first control phase of a transmission cycle, the input ports write information into a token indicating the output ports to which their packets are to be sent, thereby reserving the appropriate output ports. In the second control phase of a transmission cycle, the output ports read the token and tune their receivers to the appropriate input port wavelengths. During a transmission phase of a transmission cycle, packets are transmitted via the optical star transmission network from the input ports to the output ports. Simultaneously, with the startup of the transmission phase, the token generator emits a token so as to start the first control phase of the next subsequent transmission cycle. Transmission occurs in

parallel from many input ports to many output ports, without collisions due to multiwavelength optical transport through the star network.

With *Arthurs*' disclosure of the above phasing operation, *Arthurs* clearly could not teach tuning a second tunable filter of the plurality of tunable filters to a second wavelength while the first tunable filter processes the optical signal having primarily the first wavelength. Accordingly, for at least this reason, Applicant submits that independent Claim 58 and its dependents, Claims 59-61, should be allowed.

b. Claims 62, 65, 70, and 83 are improperly rejected

Additionally, Applicant notes that the Office Action did not include explicit rejections of independent Claims 62, 65, 70, and 83, and dependent Claims 59, 63, 64, and 66. Rather, to Applicant's knowledge, the only claims explicitly addressed in the Office Action were independent Claim 58 and dependent Claims 60 and 61. Applicant respectfully reminds the Examiner that 37 C.F.R. § 1.104 (c)(2) sets forth the following requirements in establishing a rejection:

In rejecting claims for want of novelty or obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.

(Emphasis added). The Office Action's rejections do not provide the Applicant with an understanding of the PTO's rationale for applying the disclosure of *Arthurs* to independent Claims 62, 65, 70, and 83, and dependent Claims 59, 63, 64, and 66. Accordingly, Applicant submits that the PTO has failed to cite the references properly and with sufficient specificity under 37 C.F.R. § 1.104 to allow Applicant to adequately respond to the rejections. And, because the Office Action has not complied with these requirements, the PTO has failed to establish a *prima facie* rejection of independent Claims 62, 65, 70, and 83, and dependent Claims 59, 63, 64. Accordingly, for at least this reason, Applicant submits that independent Claims 62, 65, 70, and 83 and dependents Claims 59, 62, 63, 64, and 66 should be allowed.

c. Claim 62 is patentable over *Arthurs*

Notwithstanding the above, independent Claim 62 is additionally allowable because *Arthurs* fails to disclose, expressly or inherently, "at a first tunable optical transmitter tuned to a first wavelength and associated with a first input link to the router, generating an optical

router signal having primarily the first wavelength” and “tuning a second tunable optical transmitter associated with the first input link to a second wavelength without emitting light while the first optical transmitter generates the optical router signal having primarily the first wavelength.” As referenced above, the Office Action neither points to any particular features in *Arthurs* that disclose the above limitations. Additionally, Applicant is unaware of features in *Arthurs* which could disclose the above limitations. Rather, FIGURES 1, 2, 10, and 12 show that *Arthurs*’ transmitters are fixed wavelength transmitters. Additionally, the lasers in FIGURES 1, 2, 10, and 12 have only one laser per port or separate input. Accordingly, for at least this additional reason, Applicant submits that Independent Claim 62 and its dependents, Claims 63-64, should be allowed.

d. Claim 65 is patentable over *Arthurs*

Notwithstanding the above, independent Claim 65 is additionally allowable because *Arthurs* fails to disclose, expressly or inherently, “receiving at a first line card a first optical packet comprising a payload and having a first duration”; “generating, based on the first packet, an optical router packet comprising the payload and having a second duration shorter than the first duration, the optical router packet having a first wavelength.” As referenced above, the Office Action neither points to any particular features in *Arthurs* that disclose the above limitations. Additionally, Applicant is unaware of features in *Arthurs* which could disclose the above limitations. As an example, an input interface is described beginning at column 8, line 34 of *Arthurs*. However, *Arthurs* provides no indication that the packet emerging at the output is shorter than what went in. See *Arthurs*, FIGURE 8. Accordingly, for at least this additional reason, Applicant submits that independent Claim 65 and its dependent, Claim 66, should be allowed. Independent Claim 83 should be allowed for analogous reasons.

e. Claim 70 is patentable over *Arthurs*

Notwithstanding the above, Independent Claim 70 is additionally allowable because *Arthurs* fails to disclose, expressly or inherently, “receiving at an express lane in the router an express optical packet having a second wavelength”; “communicating the optical router packet and the express packet to a star switching fabric”; “communicating the optical router packet and the express packet from the star switching fabric to each of a plurality of tunable filters each associated with a separate output link from the router”; and “communicating a control signal to at least a selected tunable filter associated with a communication path to a

destination element associated with the express optical packet, the control signal operable to cause the selected tunable filter to tune to the wavelength of the express optical packet and to facilitate communicating the express optical packet toward the destination element without converting the express optical packet to an electronic format.” (emphasis added). As referenced above, the Office Action neither points to any particular features in *Arthurs* that disclose the above limitations. Additionally, Applicant is unaware of features in *Arthurs* which could disclose the above limitations. For example, *Arthurs* mentions nothing of an express lane. Additionally, all the inputs described in *Arthur* go to an input port. See *Arthurs*, FIGURE 8. And, all the outputs go to an output port. See *Arthurs*, FIGURE 9. Both the input port of FIGURE 8 and the output port of FIGURE 9 of *Arthurs* require optical to electronic conversions. Accordingly, *Arthurs* could not disclose the above limitations. Accordingly, for at least these additional reasons, Applicant submits that Independent Claim 70 should be allowed.

No Waiver

All of Applicant’s arguments and amendments are without prejudice or disclaimer. Additionally, Applicant has merely discussed example distinctions from the *Arthurs* reference. Other distinctions may exist, and Applicant reserves the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicant does not acquiesce to the Examiner’s additional statements. The example distinctions discussed by Applicant are sufficient to overcome the anticipation rejections.

Request for Evidentiary Support

Should a rejection based on any of the above asserted rejections be maintained, Applicant respectfully requests appropriate evidentiary support. Additionally, if the Examiner is relying upon “common knowledge” or “well known” principles to establish the rejection, Applicant requests that a reference be provided in support of this position pursuant to M.P.E.P. § 2144.03. Furthermore, to the extent that the Examiner maintains any rejection based on an “Official Notice” or other information within the Examiner’s personal knowledge, Applicant respectfully requests that the Examiner cite a reference as documentary evidence in support of this position or provide an affidavit in accordance with M.P.E.P. § 2144.03 and 37 C.F.R. 1.104(d)(2).

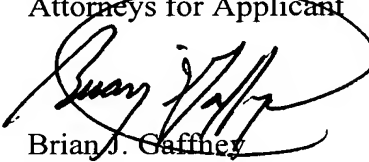
CONCLUSION

Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully request reconsideration and full allowance of all pending Claims.

Applicant believes that no fees are due. However, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

If the Examiner feels that a conference would advance prosecution of this Application in any manner, Brian J. Gaffney stands willing to conduct such a telephone interview at the convenience of the Examiner. Mr. Gaffney may be reached at (214) 953-6682.

Respectfully submitted,
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